

Reconsideration of the application is respectfully requested.

I. AMENDMENT

Please make the following amendments:

In the claims:

Σ¹ 264. (Amended) A polynucleic acid which is chosen from the group consisting of

(i) the nucleotide sequences having SEQ ID 1, 3, 5, 7, 9, 11, 13 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103 or 105,

(ii) a part of said polynucleic acid of (i) which is unique to at least one of the new HCV types 7, 9, 10 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1, and [or]

(iii) the complement [thereof] of the polynucleic acid of (i) or (ii).

Σ² 365. (Twice Amended) A polynucleic acid according to claim 65, wherein the polynucleic acid is selected from

(i) a polynucleic acid encoding an HCV polyprotein comprising in its amino acid sequence at least one of the following amino acid residues; I15, C38, V44, A49, Q43, P49, Q55, A58, S60 or D60, E68 or V68, H70, A71 or Q71 or N71, D72, H81, H101, D106, S110, L130, I134, E135, L140, S148, T150 or E150, Q153, F155, D157, G160, E165, I169, F181, L186, T190, T192 or I192 or H192, I193, A195, S196, R197 or N197 or K197, Q199 or D199 or H199 or N199, F200 or T200, A208, I213, M216 or S216, N217 or S217 or G217 or K217, T218,

I219, A222, Y223, I230, W231 or L231, S232 or H232 or A232, Q233, E235 or L235, F236 or 6236, F237, L240 or M240, A242, N244, N249, I250 or K250 or R250, A252 or C252, A254, I255 or V255, D256 or M256, E257, E260 or K260, R261, V268, S272 or R272, I285, G290 or F290, A291, A293 or L293 or W293, T294 or A294, S295 or H295, K296 or 3296, Y297 or M297, I299 or Y299, I300, S301, P316, S2646, A2648, G2649, A2650, V2652, Q2653, H2656 or L2656, F2659, K2663 or 12663, A2667 or V1667, D2677, L2681, M2686 or Q2686 or E2686, A2692 or K2692, H2697, I2707, L2708 or Y2708, A2709, A2719 or M2719, F2727, T2728 or D2728, E2729, F2730 or 72730, I2745, V2746 or E2746 or L2746 or K2746, A2748, S2749 or P2749, R2750, E2751, D2752 or N2752 or S2752 or T2752 or V2752 or I2752 or Q2752, S2753 or D2753 or G2753, D2754, A2755, L2756 or Q2756, R2757, with said notation being composed of a letter representing the amino acid residue by its one-letter code, and a

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: cont
number representing the amino acid numbering as shown in Table 1,

(ii) a part of said polynucleic acid of (i) which is unique to at least one of [the HCV subtypes or types as defined in claim 63] the new HCV types 7, 9, 10 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1,

(iii) or the complement of the polynucleic acid of (i) or (ii).

4
66. (Twice Amended) A polynucleic acid according to [claims] claim 63 [or 65], wherein the polynucleic acid is selected from

(i) a polynucleic acid encoding an HCV polyprotein comprising in its amino acid sequences at least one amino acid sequence chosen from the group consisting of the amino acid

sequences having SEQ ID 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 102, 104 or 106,

(ii) a part of said polynucleic acid of (i) which is unique to at least one of [the HCV subtypes or types as defined in claim 63] the new HCV types 7, 9, 10 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1,

(iii) or the complement of the polynucleic acid of (i) or (ii).

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~~67~~. (Twice Amended) A polynucleic acid according to [any of claims] claim ~~63~~ [or 65],
E² Cont wherein the polynucleic acid is selected from

(i) a polynucleic acid encoding an HCV polyprotein comprising in its amino acid sequence at least one amino acid sequence chosen from the group consisting of the amino acid sequences having SEQ ID 107 to 207,

(ii) a part of said polynucleic acid of (i) which is unique to at least one of [the HCV subtypes or types as defined in claim 63] the new HCV types 7, 9, 10 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1,

(iii) or the complement of the polynucleic acid of (ii) or (iii).

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E³ ~~69~~. (Twice Amended) A recombinant polypeptide encoded by a polynucleic acid according to any of claims ~~63~~ to ~~68~~, or a part thereof which is unique to at least one of [the HCV

subtypes or types as defined in claims 63 and 64] the new HCV types 7, 9, 10 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1.

8
E3 70. (Twice Amended) A method for production of a recombinant polypeptide [of claim 69], comprising:

F transformation of an appropriate cellular host with a recombinant vector, in which a polynucleic acid or a part thereof according to any of claims ~~63~~¹⁴⁵ to ~~68~~ has been inserted under the control of the appropriate regulatory elements, the polynucleic acid or the part thereof thus being an insert,

culturing said transformed cellular host under conditions enabling the expression of said insert, and

harvesting said polypeptide.

54 73. (Twice Amended) A peptide corresponding to an amino acid sequence encoded by [at least] one of the polynucleic acids according to any of claims ~~63~~¹⁴⁵ to ~~68~~, with said peptide comprising an epitope which is unique to at least one of [the HCV subtypes or types as defined in claims 63 and 64] the new HCV types 7, 9, 10 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1.

II. RESPONSE TO OFFICE ACTION

The above amendments of claims 65-70 and 73 are intended to incorporate referenced subject matter in order to overcome the rejection of these claims under 35 U.S.C. §112, second paragraph. The amendment of claim 64 finds support at p. 15, lines 6-8. It is believed that the outstanding rejection under 35 U.S.C. §112, second paragraph, for improper multiple dependent claim form, is hereby overcome, and that all pending claims 63-74 are in condition for allowance.

The Examiner is invited to contact the undersigned attorney at (713) 787-1438 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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